

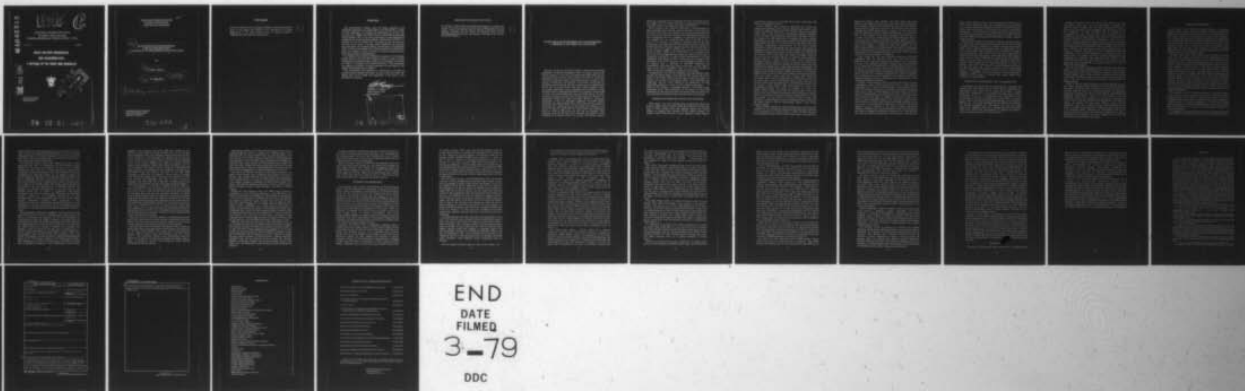
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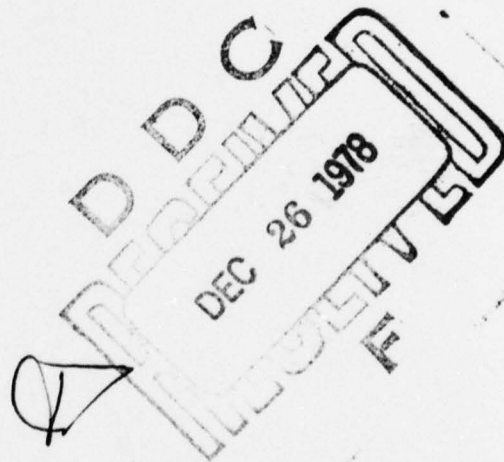
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**SOVIET MILITARY WEAKNESSES  
AND VULNERABILITIES:**

**A CRITIQUE OF THE SHORT WAR ADVOCATES\***

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A CRITIQUE OF THE SHORT WAR ADVOCATES,

by

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Keith A. Dunn

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31 July 1978

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Military issues research memo,

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# FOREWORD

This memorandum considers what the author perceives as the exploitable weaknesses and vulnerabilities of the Warsaw Pact. In light of these weaknesses, he examines the assumptions of the short war advocates, who suggest that NATO and the United States must make radical changes in force structuring, positioning of troops, planning and programing for future European military requirements if NATO is to continue to deter the Warsaw Pact. He points out that the short war advocates do not seem to recognize these weaknesses and concludes that government and academic analysts should begin a comprehensive study of Soviet vulnerabilities and weaknesses before the United States makes any changes in posture, doctrine, or objectives based upon the short war advocates' recommendations.

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This memorandum was prepared as a contribution to the field of national security research and study. As such, it does not reflect the official view of the College, the Department of the Army, or the Department of Defense.

*Robert C. Verks*  
ROBERT C. VERKS

**ROBERT G. YERKS**  
Major General, USA  
Commandant

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## BIOGRAPHICAL SKETCH OF THE AUTHOR

DR. KEITH A. DUNN joined the Strategic Studies Institute as a civilian in the summer of 1977. Prior to that time he was an Army intelligence officer. Dr. Dunn earned a master's and doctorate from the University of Missouri in American diplomatic relations, and has written and published articles on the interrelationships between detente and deterrence, the origins of the Cold War, and the Soviet military.

## **SOVIET MILITARY WEAKNESSES AND VULNERABILITIES: A CRITIQUE OF THE SHORT WAR ADVOCATES**

Recently a group of authors have begun to question the traditional Department of Defense assumptions about how much warning time NATO would have in the event of a Warsaw Pact (WP) attack upon the European alliance and how long a NATO versus WP war would last. This debate, generated about a disconnected group of authors I have chosen to call the short war advocates,<sup>1</sup> has enormous ramifications for all military services because the short war advocates are suggesting that NATO and the United States must make radical changes in force structuring, positioning of troops, planning and programing for future European military requirements if NATO is to continue to deter the WP or survive a conventional WP attack upon the NATO alliance. The issues raised by this group of authors are extremely important. However, the assumptions which drive their conclusions should be reexamined particularly in light of defineable, exploitable Soviet/WP military weaknesses and vulnerabilities. These latter points are the purpose of this paper for it seems, at least to this author, that before one can accept the idea that NATO and the United States must change their forces to survive a WP attack one must ask the questions: What limitations does the WP face which internally would inhibit it from achieving its prescribed scenario for success; have Western analysts

adequately computed Soviet weaknesses into their speculations before they suggest NATO is doomed; and, not to mention nor even discuss in this article, the now near cliché, how likely is a WP attack?

Before turning to the substance of this essay, it seems imperative to define somewhat more narrowly what has and what has not motivated this article. First, this is not intended to be an essay which argues that the short war advocates are wrong and the traditionalists are correct in their assumptions about the possibility or probability of a WP-NATO war, warning time, or, in general, whose views of the WP are more correct. It is, however, an attempt to question some of the basic assumptions upon which the short war advocates base their analysis and thereby raise some previously unasked questions. Second, this effort is not an attempt to suggest a different force posture or positioning of troops for either NATO or the United States. It is an attempt to say that those who are suggesting some radical new military policies may be basing their conclusions on some mistaken interpretations of Soviet capabilities. Third, this is an effort to argue that any discussion of WP capabilities versus NATO deterrence and warfighting capabilities must be balanced with a discussion of Soviet/WP weaknesses and vulnerabilities. This latter area is seldom addressed in the same depth or degree as are Soviet capabilities, which are most often discussed in terms of a discreet cataloguing of equipment and personnel.

Recognizing that the WP has weaknesses and vulnerabilities makes one view the Soviet soldier as something less than ten feet tall. As one analyst of the Soviet military has said, such an approach makes one question the tendency "to view Soviet soldiers, both individually and collectively, and the Soviet military as an organization, as being qualitatively superior to most of their Western counterparts. . . ."2 While the WP remains a formidable adversary, it becomes a more manageable threat. More specifically for this article, to identify WP deficiencies in some vital area makes it intuitively difficult to accept the type and length war which the short war advocates have postulated.

#### SUMMARY OF SHORT WAR ADVOCATES' POSITIONS

There seems to be four essential points of agreement among this group of writers. First, as Steven Canby and Robert Komer have said, there is really nothing wrong with flexible response and forward defense as concepts which motivate NATO's defense strategy. The problem is that NATO is poorly, if at all, organized to wage a vigorous



conventional response to a Soviet/WP attack which would begin with little or no warning for NATO.<sup>3</sup>

Second, NATO's armies should be specialized for Europe and oriented toward fighting a short, intense defensive conflict which would continue probably no longer than 30 to 90 days. This newly postured NATO Army would increase its on-the-ground fighting capabilities while at the same time reducing its logistical and noncombat overhead, i.e., improve the teeth-to-tail ratio to resemble the Soviet example. Allied nations and the United States should abolish the World War II expeditionary attributes of its current forces and replace them with additional on-the-ground combat power for the Central Region. Specifically, Canby recommends that under a short war posture the following actions would not only increase NATO's initial warfighting capabilities but also would result in reduced military cost. With a short war posture, NATO could reduce the number of engineers needed in the force structure because road and rail networks would sustain less damage than in a longer duration conflict. Fewer maintenance personnel would be required in a short war posture for in such a war equipment would be allowed to deteriorate without repairs since there would not be enough time to repair major line items of equipment and return them to the battlefield before the war ended. Fewer logistic and support troops would be required. NATO would have to use whatever supplies it had on hand and the United States would depend primarily upon host nation support agreements because there would be insufficient time to receive supplies from the United States. NATO and US surface fleets could be substantially reduced. Thus, numerous cost savings could be made and redirected into Central Region ground forces by sharply curbing NATO's high expenditures for surface and antisubmarine warfare fleets which are unneeded in a short war. Finally, NATO's flanks would have little bearing upon a short war battle in the Central Region and resources should be directed from the defense of the flanks toward bolstering the Central Region. As Canby once argued, the best defense for Greece, Turkey, Norway, and Denmark is a strong defense of the Central Region because "control of the flanks would be difficult and probably useless" if the Central Region collapsed.<sup>4</sup>

Third, the WP is organized to wage a *blitzkrieg* type war which would capitalize on a few strategically planned breakthroughs that would lead to war termination in a matter of days or weeks. The WP concept of unit replacements rather than individual replacements, extremely small



logistic tail, emphasis upon maneuver and shock forces rather than firepower and infantry-oriented forces, and cadre staffed units which can be rapidly mobilized and committed to battle force the USSR to want and need to fight only a short war. Thus, the short war advocates conclude that NATO should posture to counter the short war threat and tell NATO often to mirror image the WP because, as one author has said, "it is just possible that we have something to learn from them."<sup>5</sup>

Fourth, one portion of this group, not Canby and Komer, seem to believe that short warning equals short war. Their argument seems to run something to the effect that the WP currently has the capabilities to attack from virtually a standing start. With this capability, and the ability to deny NATO its normally assumed three weeks of warning, the Pact would streamroll over NATO and be at the Rhine before NATO could establish its conventional defenses. As a result, NATO would be forced to the nuclear threshold or surrender.<sup>6</sup>

If one accepts the short war advocates' assumptions about WP capabilities, then the conclusions that they reach seem logical. However, when one questions their basic assumptions, it is very possible to arrive at very different conclusions. Among many of the advocates for an American and NATO short war strategy there seems to be a tendency to accept statements about Soviet capabilities at face value but to fail to examine Soviet vulnerabilities and weaknesses that might restrict the WP from achieving or initiating such a short war strategy. Force posturing is the sum of capabilities plus weaknesses. Without an adequate assessment of Soviet weaknesses and vulnerabilities we have only analyzed half of the equation.

The lack of understanding of what shall be called Soviet systemic vulnerabilities (those societal imperfections which a NATO military commander may or may not have the ability to affect directly by his action but still affect Soviet force application) and military weaknesses (those things which a NATO military commander should be able to exploit on a battlefield) is disconcerting. How can it be definitely stated that the WP has the ability to mobilize understrength divisions in a matter of days, logistically support them, and plan a highly intense, short duration war when those factors which might preclude such an action have not adequately been analyzed or examined? The normal response to such a question is that NATO's posture, positioning, readiness, maldeployment, lack of ammunitions, lack of reinforcements and reserves, inadequate mobilization procedures, etc. would preclude any hope that NATO could present a viable defense in the event of a

Soviet assault. However, many of the deficiencies that NATO has the WP also faces. Admittedly, quite often the magnitude of some problems such as reinforcements and resupplies are greater for NATO because the United States is physically so far removed from the Central Region. Nevertheless, it seems wrong that focusing upon NATO's problems can quite easily cause analysts to overlook the fact that the WP is likewise faced with significant deficiencies that limit Moscow's ability to project its military power.

When analysts avoid discussing Soviet weaknesses and vulnerabilities they quite often double worst case the situation. On one hand, the Pact is granted numerical superiority in weapons systems and personnel which can be mobilized and introduced into the battlefield on short notice. On the other hand, the WP forces are not attrited or recognized to have deficiencies while NATO forces are either quantitative or subjectively attrited on the basis of known deficiencies. The important point, however, is that the WP does have weaknesses and vulnerabilities. NATO can exploit them but some creative thought in this area is required. Such thought has not been generated by the short war advocates' critique of NATO because the recommendations of the short war advocates really only point to one part of the force posturing equation: improvements in NATO forces in order to nullify Soviet strengths or capabilities. Before the equation of force posturing is completed, NATO needs to identify and exploit Warsaw Pact weaknesses and vulnerabilities.

#### WARSAW PACT WEAKNESSES AND VULNERABILITIES

An abundance of information exists regarding Pact capabilities and strengths but little usable data on Soviet military weaknesses and vulnerabilities exists. There are few studies that attempt to discuss Warsaw Pact deficiencies in a comprehensive manner that a military commander can use or to demonstrate how Soviet/Warsaw Pact shortcomings could limit the ability of the Warsaw Pact to bring its forces to bear at a specific point and designated time. To put the issue a different way, do enough identifiable and exploitable Soviet/Warsaw Pact military weaknesses and vulnerabilities exist that one should question the contention that from a standing start the Warsaw Pact could attack NATO with approximately 58 divisions and within a matter of weeks build toward 170-180 divisions?<sup>7</sup>

Stating the problem does not answer the question why such vulnerability studies have not been undertaken. Answering that question requires another essay but three conjectures will have to suffice. First, the problem becomes tangled in the old intelligence cliché that intelligence can assess capabilities but not intentions and commanders are only concerned with enemy capabilities because intentions can easily change. While it takes some very contorted logic to transpose military vulnerabilities into intentions, it still occurs. On a variety of occasions when this author was trying to obtain a grasp on the issue of Soviet military vulnerabilities and weaknesses, the question kept being raised that the US/NATO could not posture its forces on the basis of Warsaw Pact deficiencies because these problems could and would be corrected. That concept is true but likewise Warsaw Pact capabilities, as well as NATO capabilities, also change over time. The entire process is a dynamic one that is constantly changing and must continually be reexamined. The important issue, however, is that NATO should posture to nullify Warsaw Pact strengths and exploit weaknesses and vulnerabilities, not posture solely on the basis of Warsaw Pact shortcomings.

Second, traditionally, intelligence analysts have not been tasked to think in terms of Soviet vulnerabilities or weaknesses and how these limitations would affect Soviet capabilities to project its quantitatively awesome military power. If this area were to become an issue of prime consideration for decisionmakers, analysts would have to consider this topic if they had any pretensions of affecting US political/military decisionmaking.

Finally, in Western political systems, where the budgetary processes and annual arguments before legislatures for defense appropriations often drive the military force structure, posture and size more than a potential adversary threat, it is extremely difficult for government bureaucrats to support the study of Soviet military vulnerabilities and weaknesses. There seems to exist a fear that pointing out Soviet deficiencies will become interpreted as an attempt to describe the Soviet Union as impotent and lead to less spending of scarce dollars for defense. To reiterate the basic point, however, there are Soviet deficiencies which can be identified. Some have been discussed on a variety of occasions and others have not. What currently needs to occur is to reexamine Soviet weaknesses and vulnerabilities and then to bounce them off the short war advocates' assumptions in order to determine how reasonable are the latter's suggestions. The latter point is the focus of the remainder of this paper.



## MILITARY WEAKNESSES

*Armor Heavy Units With Few Infantry Troops.* As currently designed, Soviet forces are heavily armored oriented. Motorized rifle divisions have 266 tanks or just 58 fewer than a US armor division. A Soviet armor division has 325 tanks, one more than its US counterpart, in a division which has nearly 5,000 fewer personnel. Soviet divisions have a similar heavy density of armored personnel carriers (APC's). The composite picture then is a Soviet force which depends heavily upon maneuver, mobile forces, armored shock action, and infantry troops using APC's not as taxis on the battlefield but rather as armored fighting vehicles that can keep pace with tanks and provide their own organic protection for the infantry soldiers.

Although some sources tend to believe that the Soviet Union has chosen the best possible posture and its armor predominance is best optimized for the European conflict, the 1973 Middle East War raises some questions about the Soviet armor-infantry ratio of its forces. For instance, on the second day of the Middle East War, elements from the Israeli Southern Command tried to counterattack against Egyptian forces toward the Suez Canal. The lead Israeli force, an armored brigade, lacked organic infantry or armored infantry forces. When this Israeli unit attacked, it impaled itself upon a heavily fortified Egyptian antitank defense force which used not only tanks and sophisticated antitank guided missiles (ATGM's) but also infantry hand-held weapons, the RPG-7. Egyptian infantry troops sprang from trenches, swarmed the attacking force, and destroyed the Israeli force at will. In the end, the Israeli armored brigade tried to retreat with only four functioning tanks. This failed and the Israeli commander and four other soldiers surrendered.<sup>8</sup>

The lesson from the 1973 War does not seem to be that the tank is obsolete. Rather, as one Israeli has concluded, "the tank still remains a dominant factor on the field of battle, provided that it is part of a well-planned battle team which is capable of answering the problem of modern warfare." A former commandant of the US Armor School agrees and recently said that the greatest lesson learned from the 1973 War was "that there is no single system that's going to dominate the modern battlefield."<sup>9</sup>

As originally conceived, the Soviet idea that they wanted to protect their soldiers from the inevitable nuclear blasts and radiation effects of

any future war and that armored and infantry motorized troops would have better protection than foot infantry was excellent. However, in the current precision guided munitions (PGM) environment, NATO/US has the capability to exploit the Soviet combined arms concept. What is most interesting is that the Soviets have recognized this situation and have openly discussed how ATGM's and PGM's have improved defensive capabilities and caused the Soviet military to requestion their tactics. However, in the West very little attention has been given to this debate. Moreover, in the West, there has been very little discussion of how best to exploit the issues which the Soviets themselves have identified.<sup>10</sup>

One of the weakest links in the Warsaw Pact combined arms concept and tactics is the necessity to achieve extremely high rates of advance and make any conflict as short as possible. As former Minister of Defense, Marshal A. A. Grechko has written:

The basic requirement for a tactical offensive are the suddenness and swiftness of blows, a skillful combination of firepower and movement, the ensuring of superiority over the enemy at the decisive points and at the decisive moments of battle, a flexible maneuver of men and equipment, the prevention of enemy build-up efforts, encirclement and destruction of enemy groupings piecemeal, relentless pursuit of the enemy day and night, and consolidation of success.<sup>11</sup>

If the Pact forces fail to achieve this objective, the entire system becomes strained; the Soviets are somewhat fearful that they will be unable to manage such a situation. One method for slowing the desired, rapid Warsaw Pact advance is to make the motorized infantry troops dismount their APC's and move on foot rather than advance at the same speed as the tanks. To do this, NATO must engage APC's with ATGM's, PGM's, and artillery at the weapons' maximum feasible firing ranges because the APC's are more vulnerable to these types of weapons systems than are tanks.

Making the Warsaw Pact motorized infantry dismount starts a chain reaction that the Soviets do not want to see occur. Dismounted infantry become vulnerable to artillery, small arms, and scatterable antipersonnel mines. With the infantry moving on foot, tanks must slow their assault because to continue the armor attack without accompanying infantry makes the tank vulnerable to pockets of antitank resistance like the Israelis faced in the Sinai. Slowing the attack so that armor and foot infantry can move together and protect each other increases tank vulnerability by making the tanks less mobile



targets. It also slows the Warsaw Pact rate in advance.<sup>12</sup> This in turn increases the probability that any conflict would not be a blitzkrieg to the Rhine or the English Channel within 10 days, which many short war advocates postulate, but might mean that the conflict would become a longer war of attrition. Slower rates of advance would mean that the Warsaw Pact would require more ammunition, more POL, additional supplies, and increased personnel replacements. By exploiting these military attributes the tactical commander could strain the entire Soviet system and increase the opportunities that systemic vulnerabilities, such as the lack of initiative among Soviet soldiers, questionable non-Soviet Warsaw Pact (NSWP) allegiance to USSR objectives, logistical weaknesses, and national will would surface and adversely affect Soviet battlefield capabilities.

*Command and Control as a Function of Communications.* Soviet tactical command and control reflects the centralized bureaucratic nature of the Soviet society in general. Decisionmaking is compressed into the hands of only a few decisionmakers with little trust exhibited downward toward subordinates. In the military, this is reflected by commanders assuming control of entire subordinate units and a reluctance to delegate authority to lower echelons. Subordinates are reluctant to use their own initiative and act unless they receive direct orders. As a result, Soviet command and control is not only personally but also physically centralized because a unit's command and control is where the commander is located.

In the past, when Soviet tactics called for steamrolling tactics where mass and prescribed objectives were the rule, extremely centralized command and control performed a useful purpose. However, in an environment of sophisticated defensive weapons, when maneuver, dispersion and raid tactics are more important from a Soviet view, centralized command and control may be counterproductive. For instance, in the last two years, the Soviets have begun to emphasize that the proliferation of antitank weapons has made massive breakthrough operations less appealing.<sup>13</sup> To counter the potentially strong antitank defenses, Soviet military writers have argued that Warsaw Pact units should engage the enemy before it has the time to prepare its defense. If successful, rather than division/army size breakthrough attempts, regiment/battalion size units would maneuver on multiple axes avoiding pockets of enemy resistance and perform fast moving meeting engagements or "daring thrusts."<sup>14</sup> If this is the direction that Soviet military tactics are evolving, it is in conflict with the centralization

endemic within the Soviet military structure. On one hand, the tactics imply a fluid, fast moving battlefield situation in which subordinate commanders must utilize their initiative. On the other hand, Soviet units seem to lack the command and control facilities and hardware to react to such a fast moving environment.

On this latter point, a Soviet tank battalion has only a single operational radio net.<sup>15</sup> In comparison, a US tank battalion has four internal nets to control each platoon and one net to its higher headquarters. With only one net Soviet commanders must not only communicate with each platoon but also with its regiment and division commanders for supporting artillery fire, air support, resupplies and general intelligence appraisal of a fast moving battlefield situation. The lack of additional radio nets means that the total nerve center of a Soviet tank battalion is the commander and in effect he must position all 31 tanks in the battalion rather than allow company and platoon commanders to use their initiative. For, if individual companies and platoons were allowed indiscriminately to enter the radio net, the battalion would lose its ability to communicate with higher headquarters and control its organic tanks. While there are advantages to such a position, i.e., cost, intelligence security, etc., it is very inflexible and as a result incompatible with the idea of fast moving maneuver battlefield operations. More importantly, if that communication tie were severed either by physical destruction of the commander or electronic interruption, the entire battalion would be vulnerable for it would have lost its centralized commander and control center.

*Naval Geography and Posture Constraints.* The Soviet Union's main naval problem is the necessity of maintaining four separate fleets. No amount of planning can overcome the fact that geography has constrained and forced the USSR to maintain four distinct fleets. To compound the problem, the USSR's geostrategic position has denied its fleets uninhibited access to the open seas and even if one assumes that the USSR would do its utmost to minimize port constraints and disperse as much of its fleet to the open seas as possible prior to a conflict, Soviet naval deployment, development, lack of foreign bases, and geography have provided NATO with weaknesses that it can exploit. For example, as former Secretary of Defense Donald Rumsfeld said in his FY 1977 posture statement: "We believe that the Soviets, while improving their Navy and extending its capabilities, still have areas of significant weaknesses." Their antisubmarine warfare (ASW)

capabilities are inadequate and Soviet ASW ships continue to have difficulty locating American Polaris, Poseidon, and the more modern attack submarines. Their own submarines, diesel and nuclear, are noisy and in comparison to US submarines are relatively easy to locate and target. Of even more importance, however, the Soviet Navy is deficient in its on-time station capability and ability to maintain sustained combat naval operations. Many Soviet missile ships have no at sea reload capability. This problem currently cannot be solved adequately since the Soviets are deficient in the capability to provide at sea replenishments and what logistics ships exist are slow and highly vulnerable to NATO and US warships.<sup>16</sup> The net effect is that when many Soviet ships deplete what stores they have on board, i.e., POL, food, missiles, and ammunition, they have to return to port for resupplies. This means that they would have to bypass choke points again and the positive effect of prior ship dispersal would be negated.

A counterargument to the above scenario, which the short war advocates often use, is that the Warsaw Pact would end a war in thirty days or less, and, as a result, the US Navy would not be able to provide an important input into this short war battle. Therefore, the Soviet Navy would have little incentive to disperse its fleet prior to a conflict because the land battle in Europe would be over before the US Navy could begin providing supplies and reinforcements that would affect the land battle in the Central Region. However, it is important to remember that, if the US/NATO do not have to worry in the first thirty days about gaining control of the seas because the Warsaw Pact had *de facto* granted that status to NATO by not dispersing its fleets prior to D-day, then NATO and the United States could divert forces to participate and support the land battle in Europe.

Naval air from the American Atlantic and Mediterranean fleets, British, and French naval air would contribute significantly to the land battle if they were freed from their primary mission of sea control and allowed to pursue their secondary missions of force projection.

*Rail and Road Network Constraints.* The West has often credited the Warsaw Pact with an advantage *vis-à-vis* NATO because in the event of a war the Pact would operate from interior lines of communication whereas NATO would require reinforcements from the United States.<sup>17</sup> This assumption requires some reexamination given the Warsaw Pact's rail and road network, geographic restrictions, and the ability of NATO to perform deep interdiction strikes without penetrating Warsaw Pact airspace.



Although the USSR is one of the world's foremost powers, it lacks a developed highway system to connect the outlying regions to its industrial hub. Less than 250,000 miles of paved roads exist in the entire nation. No two Soviet cities are connected by a divided highway. It is impossible to cross the USSR on a continuously paved highway. In addition, Soviet severe weather conditions hamper what possible road travel that exists. During the winter, spring thaw periods, and autumn rainy seasons, Soviet roads are virtually impassable. The Soviets describe their situation as *rasputitsa* or roadlessness during those months.<sup>18</sup>

The lack of an effective road system could present problems for an alliance which depends upon mobilizing a large number of reserves to fill their cadre strength divisions and introducing them into battle in various assault phases. If one uses the 1968 invasion of Czechoslovakia as an example, a number of significant problems become visible, all of which could preclude bringing enough force to bear at critical points to make a European conflict a brief campaign to the Rhine or English Channel.

During the 1968 invasion, Soviet and NSWP forces showed no inclinations to travel off the main highways or roads. While this in and of itself would present a defending force opportunities for interdiction, it is even more important to remember that the Czech road network was unable to handle the volume of traffic. The steel treads of Soviet tanks and APC's damaged the soft asphalt roads so badly that they became virtually impassable. As a result, during the first days of invasion, as one observer has written, "mile-long jams and traffic tieups [developed] that would have been tempting targets for missile strikes or fighter-bomber attacks in any shooting war."<sup>19</sup> Soviet second and third echelon units could face the same type of problems as their colleagues did in Czechoslovakia because the majority of Soviet roads are the same type of soft macadam that caused traffic snarls in 1968.

While the road network does present some deficiencies, Soviet rail lines probably provide a more lucrative weakness for NATO to exploit. On numerous occasions the Soviets have indicated that they would try to move the bulk of their equipment and resupplies by rail if a war should ever occur in Europe. In western USSR, East Germany, Poland, and Czechoslovakia the rail network is probably adequate to achieve this goal, despite a tendency of several rail lines to meet around heavy populated cities and for important roads to parallel the rail lines. However, in Romania, Hungary, and the non-European sectors of the USSR, poor rail distribution would probably preclude obtaining this objective.

Adequate quantities of rail lines are only part of the picture, however. As a result of Tsarist policies, Soviet rail gauge is not compatible with the European gauge located in East Germany and parts of Poland. Soviet trains must cross at one of nine transshipment points and thus mass their trains at a few central locations.

With the current accuracy of PGM's and the perspective that in the 1980's both tactical and strategic Air Force planes will be equipped to carry highly accurate cruise missiles, the transshipment points will become lucrative targets at very little cost to NATO. NATO/US planes could engage and destroy targets deep within Warsaw Pact territory with cruise missiles that have ranges in excess of 1,500 miles and the planes would never have to penetrate Warsaw Pact airspace.

### SYSTEMIC VULNERABILITIES

As mentioned earlier, systemic vulnerabilities are those deficiencies which a tactical commander has little ability to exploit directly by his actions. These vulnerabilities are manifestations of societal attributes and in the long run may even be more important than the military weaknesses. For without at least the tacit support of the Soviet populace and that of the non-Soviet Warsaw Pact (NSWP) citizens, the Pact has no hope of success. Nevertheless, it should be remembered that at the outset of any conflict most systemic vulnerabilities will have little effect upon the ground battle but the longer the WP is forced to fight the more important these characteristics will become. Finally, it is important to remember that NATO may not be able to posture its forces totally based on systemic vulnerabilities. But, Soviet political/military planners are aware of their own internal problems and frequently write about them openly in their journals. Quite often the conclusions that they reach about their own situation are different than the conclusions reached by Western analysts.

*Reservists.* The Warsaw Pact is inordinately dependent upon a mobilizeable pool of trained reserves to fill out understrength divisions in the event of a war. In the case of the USSR, only 29 percent of its divisions (50 divisions in total: 31 in occupation roles in Eastern Europe; the rest in the USSR's western military districts and on the Sino-Soviet border) are fully manned and equipped at wartime strengths, Category I.<sup>20</sup> The remaining 118 divisions vary in manning strength from one-third to three-quarters of full strength and would require a significant input of trucks and general support vehicles from



the civilian economy before these understrength divisions would be combat ready divisions. To provide just the proper level of personnel for the Category II and III divisions, the Kremlin would have to mobilize between 600,000-700,000 former reservists in a matter of days if one is to believe the scenarios postulated by the short war advocates.<sup>21</sup> Since every year the USSR drafts and discharges to the reserves approximately 1.3 million soldiers and by law young men are not discharged from the reserves until age 50,<sup>22</sup> theoretically the USSR should have a highly trained manpower pool to call upon in the event of war. If one believes that the reserves receive their prescribed annual training that Soviet law dictates, then that large manpower pool should be well-trained.

The latter point, however, is the stumbling block. There are frequent references in Soviet writings that reservists are often recalled to active duty to participate in highly visible exercises like Dneiper, Yug (1970), and OKEAN (1975). But we really have no clear idea how often and how frequently, if at all, the majority of reservists receive training on a regular basis. We do know, however, that the Warsaw Pact has never practiced a full mobilization where all reservists leave their civilian jobs and go to the divisions that they are supposed to augment during a war.<sup>23</sup> More work needs to be done in the area of reserve training, its quality, and the reality of how often it occurs. Too often some authors tend to jump to the conclusion that because the Soviet law calls for reservist training to occur every year that in fact it does happen on a large-scale basis. We have no clear indications to suggest that this really is the case. However, for this article, the assumptions that Soviet reservists are trained are critically important to the short war advocates' conclusion.

It is fairly apparent that many reservists resent being called to active duty.<sup>24</sup> In nearly all cases a reservist receives considerably less pay on active duty than in his civilian job which causes him and his family a financial hardship. This economic hardship is compounded because a larger percentage of those recalled to active duty are technical and/or engineer reservists rather than unskilled or semiskilled laborers. The recall frequently interrupts an established professional civilian career and the individual is often more concerned about returning to his civilian job than he is with his military job. For example, one Soviet reserve lieutenant wrote *Krasnaya zvezda* complaining about his situation:

When the battalion commander asked me to take over the company, I was

quite surprised and naturally refused. I explained my refusal by pointing out that I am not a cadre officer. There is much that I do not know. I cannot be responsible for combat equipment and material.<sup>25</sup>

*Training.* Soviet unit training suffers from an overdependence upon simulators and a miserly utilization of resources. In our own capital intensive environment, we regret the fact that military commanders often lack sufficient resources to accomplish their unit's training objectives. There were complaints during the height of the oil crisis in 1973-74 when newspaper articles demonstrated that some American armor units were training with jeeps as substitutes for tanks because it was too costly to run the tanks. Nevertheless, those were choices which someone made because it was recognized that the budget—money—rather than training requirements established the parameters for training schedules. What some observers fail to recognize, however, is that many Warsaw Pact units work under the same type, if not more stringent, system and the military does not always get the best of everything that it wants.

Soviet decisionmakers have dictated that military units will use an absolute minimum of their basic ammunition loads for training purposes.<sup>26</sup> Probably this helps Soviet units to maintain their stockages at high levels and be better prepared in a short period to respond to an unexpected military situation. However, to accomplish this goal, Soviet units use very few of their organic weapons in training and they must rely heavily upon simulators. While simulators can be good learning devices when used in conjunction with the actual weapons systems, the Soviets have criticized their simulator training as predictable and routine. It seems that many Soviet commanders rely so heavily upon simulators that their troops do not meet expected performance criteria when they use the actual equipment. In addition, Soviet writers have commented that too often their training is stylized and "the soldiers, the sergeants and the officers know in advance what problem will be treated and where and what actions their commanders expect of them."<sup>27</sup>

The Soviets have created a situation which has an inherent paradoxical dichotomy for their training. Training is supposed to emphasize combat realism; soldiers are supposed to be put under extreme stress that closely resembles a typical battlefield situation; and military personnel are supposed to be hardened both physically and psychologically by their unit training for the rigors of war. But, the Soviet view of thriftiness, to the point of miserliness, conflicts with

these objectives. As a result, it is not surprising to find Soviet writers on one hand congratulating units for successes, but on the other hand criticizing the methods used. For example, one Soviet unit was applauded for achieving "high results in firing . . ." Simultaneously, it was chastized for doing so "at the expense of using live rounds for shells."<sup>28</sup>

What effect stereotyped training and lack of live fire with a unit's organic weapons will have upon Soviet proficiency is unclear. However, it will have some effect and the Soviets discuss their situation rather openly when they complain about stylized training scenarios and their inability to achieve target kill requirements after training on simulators. If Soviet units would have difficulty in reacting to unexpected actions from a defender, and do not achieve the hit probabilities Soviet manuals require, does this not affect the short war advocates' assumptions that Warsaw Pact units would be at the Rhine within a matter of days after the war began? Could Soviet planners even conceive of this objective as a real possibility given the varied problems that they have in training when current training areas are known to soldiers? Would not lower hit probabilities and disorganization retard the ability of Soviet units to obtain their prescribed daily rates of march?

*Poor Map Reading Skills.* The Soviets probably possess the most detailed relief maps and mockups of any country in the world.<sup>29</sup> However, they are one of the most underutilized tools in the Soviet inventory. All military maps are controlled and classified. Losing a map or compromising one is a severe offense punishable by imprisonment or death. Because of the strenuous controls, individual soldiers obtain very little training in applied map reading, higher Army echelons are reluctant to disseminate maps for fear that they might be compromised and as a result Soviet units demonstrated extremely low capabilities in land navigation.<sup>30</sup>

To compound the problem, Soviet soldiers apparently do not bring any specific map reading skills with them when they enter the military as do many Western civilians because the Soviet citizen has no way of acquiring this skill on his own. No map published in the USSR is totally accurate. Probably, for some distorted security reasoning, every river, city, village, mountain, street, etc. is slightly misplaced on a Soviet map.<sup>31</sup>

Suffice to say, the paucity of maps, classification of military maps, and poor land navigation capabilities should make one question how



efficient units would operate in an unfamiliar environment. Should threat analysts accept at face value Soviet stated objectives that their units are supposed to march 30-50 kilometers a day in a nonnuclear environment and 100 kilometers in a nuclear environment when those units may not know where they are going, where they have been, or much less where they are?

*Lack of Standardization.* The West has generally given the Warsaw Pact credit for standardization of equipment not only within Soviet units but throughout the Pact since the USSR is the preeminent supplier. As a result of this perceived standardization, analysts have normally given the USSR some logistical and tactical advantages when compared to the lack of uniformity within NATO.

Standardization has occurred in major WP vehicle chassis and engine components. However, there seems to be less standardization in ordnance and equipment mix in Soviet/Warsaw Pact divisions than has normally been accredited the Pact. For example, a wide variety of armored vehicles and main guns exist: T-62 tanks with 115 millimeter (mm) smooth bore main guns; T-54/55 tanks with 100 mm guns; PT-76 light tanks with 76 mm main guns; ASU-57 assault guns with 57 mm guns. A similar situation exists with the artillery: 152 mm howitzers, 122 mm howitzers, 130 mm guns, 180 mm guns, 122 mm multiple rocket launchers, 120 mortars, and 240 mortars. A unique mix of track and wheeled APC's and reconnaissance vehicles also exist. The most modern Soviet APC, the BMP, is a diesel tracked vehicle with a 73 mm main gun, which means that it is the only armored vehicle possessing such a gun. The BTR-60 is a gasoline wheeled vehicle with 14.5 mm and 7.62 machine guns as its main weapons. The BTR-50, the oldest APC, is again a diesel tracked vehicle and carries either 14.5 mm, 12.7 mm, or 7.62 machine guns. The main Soviet reconnaissance vehicles, BRDM 1 and 2, are gasoline wheeled vehicles.<sup>32</sup>

Soviet divisions then are a mixed bag of vehicles. The motorized rifle division has two distinct types of regiments. One type is predominantly the modern BMP while the other type has the older BTR-60 wheeled APC. In the motorized rifle division there are 320 APC's of which only 95 are the BMP. The remainder are the BTR-60's. The tank division has 152 BMP's mixed with BTR-50's. But also in the tank division there are more than 200 BRDM wheeled reconnaissance vehicles.<sup>33</sup>

The situation is even somewhat worse in NSWP divisions because Soviet allies receive the older versions of equipment. Thus, NSWP divisions will generally have T-54/55 tanks and the older BTR-50's as

their typical weapons systems. In the future this situation will probably worsen rather than improve. The Soviets have just recently introduced a new main battle tank, the T-72, for their division. Theoretically, it would seem logical that as the USSR replaced T-62's with T-72's the NSWP nations would replace their T-54/55's with the T-62's. However, there seem to be some indications that some NSWP states are resisting this type of exchange for they find the T-62 too expensive to purchase. Moreover, as more NSWP states begin to develop their own weapons, like Czechoslovakia and Romania are doing, the problem of standardization will become even more difficult.

The point, however, is that the Warsaw Pact situation does not reflect the type of standardization that one normally assumes would exist. Rather, it has many similarities to the problems which a nonstandardized NATO faces. The collection of different calibers of main guns, wheel versus tracked vehicles, and diesel versus gasoline propulsion means that the logistical system would become strained. The mixture of wheeled and tracked vehicles in the same unit raises logistical questions, and operational questions: Can the units operate in offroad capacities as well as tracked units should be able to? What kinds of logistical problems will the mixture of wheeled and tracked vehicles in the same units cause? Suffice it to say the Warsaw Pact may not be as standardized as the Western World has thought and more analysis of the lack of Pact standardization should be done to determine how best to exploit this situation.

*Central Bureaucracy.* Tightly centralized control in the Pact system could become a significant systemic vulnerability. The Soviet propensity to maintain decisionmaking at the highest practical level probably would facilitate a decision to mobilize. After that initial judgment, however, the Soviet system has historically proved to be a major block to efficient and innovative decisionmaking during military emergencies. The 1968 invasion of Czechoslovakia is an excellent example of this problem.

The Politburo arrives at decisions by consensus and reaching unanimity among fifteen different members is no mean achievement. Obtaining this consensus for foreign and military matters may be somewhat more difficult than a domestic decision because the Politburo is heavily weighted in the favor of men concerned with domestic issues. Even though some Politburo members (Brezhnev, Kosygin, Andropov, Gromyko, and Ustinov) obviously have the most experience in foreign/military issues, theoretically, at least, all members of the Politburo have equality during policy deliberations.



The Politburo decisionmaking system assures continuity in foreign military issues but it creates certain problems. Obtaining a consensus is slow and cumbersome.<sup>34</sup> Changing a decision once it is made can be difficult. Moreover, because one does not attain Politburo membership unless he is compatible with the other members, which also means age similarities (the average Politburo age is 67; the average age of the top four forming the inner circle of Brezhnev, Kosygin, Kirilenko and Ustinov is 71), new blood and new ideas seldom permeate the upper echelons. The net result of this type of decisionmaking is the perpetuation of bureaucratic inertia. Once a decision is made and because of the concept of "democratic socialism," lower level managers and bureaucrats are reluctant to alter programs. Changes must come from the top—in many cases that means the Politburo—when it would be more efficient for lower level decisionmakers to make on the spot alterations to plans and programs. Because of this highly formalized bureaucratic decisionmaking process, the Soviet system demonstrates a lack of flexibility, particularly at lower echelons. Soviet military commanders constantly complain about the lack of initiative demonstrated by their subordinates. But the problem is endemic to a system that punishes initiative and rewards those that follow orders to the letter or wait for new orders before doing something that they have not been told to do. This lack of flexibility should make it difficult for a Soviet tactical military commander to react to a fluid battlefield situation. In the event of a war, NATO should attempt to stress the Soviet decisionmaking system through deception, alternative fronts, and a constantly changing situation.

Finally, it should always be remembered that the Warsaw Treaty Organization is primarily an administrative, training and population control organization, not a wartime command structure.<sup>35</sup> The system has never been activated or practiced in full as a wartime command. Therefore, neither the West nor the Soviets have any true indications of how well the structure would function in conflict, or if the members would participate in a war with the enthusiasm necessary to achieve victory. When NATO's potential power is attrited because numerous wartime headquarters do not exist in peace, then the Warsaw Pact should be judged under the same criteria if Western analysts are looking for a true net assessment or comparison. This really has never been done.

#### REFLECTIO

The point of this essay has been twofold: first, to develop that the

Warsaw Pact has exploitable weaknesses and vulnerabilities. NATO should recognize and study these weaknesses and plan to use them to its advantage. Second, the assumptions used by many of the short war advocates do not seem to recognize that such a situation exists.

NATO and US planners should thank the short war advocates for vividly demonstrating the alliance's weaknesses in readiness, positioning, doctrine, strategy, reinforcement capabilities, etc. However, this does not mean that one should jump to the premature conclusion that the short war advocates' recommendations are completely correct. They seem to be based upon a fundamental lack of consideration of Soviet weaknesses and vulnerabilities.

Many of the Warsaw Pact problem areas discussed above can be corrected, e.g., communication deficiencies. However, it is inconceivable that all areas can be altered, particularly the systemic vulnerabilities. Thus, before the United States makes any grand changes in posture, doctrine, or objectives based upon the short war advocates' recommendations, we should ask them to address Soviet weaknesses and vulnerabilities and determine what affect these latter characteristics have upon their recommendations. Moreover, government and academic analysts should begin a comprehensive study of Soviet vulnerabilities and weaknesses in order to complete the equation of capabilities minus weaknesses equals what NATO's force posturing should be. Until such an action is undertaken we are only examining part of the equation and not making decisions based upon complete information or intelligence.

## ENDNOTES

1. There are numerous authors who display characteristics of the short war advocates. However, the following core, I would suggest, are the most prominent spokesmen and the ones who have acquired the highest visibility and acceptance: Steven L. Canby, "Dampening Nuclear Counterforce Incentives: Correcting NATO's Inferiority in Conventional Military Strength," *Orbis*, Vol. XIX, No. 1, Spring 1975, pp. 47-71; Canby, "NATO Muscle: More Shadow Than Substance," *Foreign Policy*, No. 8, Fall 1972, pp. 38-49; Canby, *NATO Military Policy: The Constraints Imposed by an Inappropriate Military Structure*, Santa Monica, California: Rand Corporation, 1972; Canby, *NATO Military Policy: Obtaining Conventional Comparability With the Warsaw Pact*, Santa Monica, California: Rand Corporation, 1973; Canby, "The Alliance and Europe: Military Doctrine and Technology," *Adelphi Papers No. 109*, London: The International Institute for Strategic Studies, 1974/1975; Robert W. Komer, "Treating NATO's Self-Inflicted Wound," *Foreign Policy*, No. 13, Winter 1973-1974, pp. 34-38; US Congress, Senate, Committee on Armed Services, *NATO and the New Soviet Threat*, Report by Senators Sam Nunn and Dewey F. Bartlett, Washington, DC: US Government Printing Office, 1977 (hereafter cited as Nunn-Bartlett Report); General R. Close, *L'Europe Sans Defense*, Brussels, Belgium, 1976. See also the threat sections of US Department of Defense, *Report of the Secretary of Defense to the Congress on the Defense Budget and Defense Program*, for the years FY 1975-79, Washington, DC: US Government Printing Office, 1974-79, for how the last three Secretaries of Defense have begun to move toward a short war position based upon assumptions about Soviet capabilities. (Hereafter document cited as *Annual Defense Department Report* with appropriate year.)

2. Herbert Goldhamer, *The Soviet Soldier: Soviet Military Management at the Troop Level*, New York: Crane, Russak, and Company, Inc., 1975, pp. 332-333.

3. Canby, *NATO Military Policy: The Constraints Imposed by an Inappropriate Military Structure*, pp. 1-5; and Komer, "Treating NATO's Self-Inflicted Wound," p. 34.

4. Canby, *NATO Military Policy: Obtaining Conventional Comparability With the Warsaw Pact*, pp. 47, 38, and 40; Canby, "NATO Muscle: More Shadow Than Substance," p. 44.

5. Canby, "Dampening Nuclear Counterforce Incentives," pp. 60-64; and Komer, "Treating NATO's Self-Inflicted Wound," p. 44.

6. Nunn-Bartlett Report, p. 3.

7. *Ibid.*, p. 6. In DOD, *Annual Defense Department Report, FY 77*, p. 97, Donald Rumsfeld argued that the Warsaw Pact would build toward a total of 220 divisions. He, however, counted the 40 plus divisions on the Sino-Soviet border. The figures cited reflect the Far Eastern divisions remaining stationary because it seems ludicrous for the Kremlin to expose its eastern border to another hostile force in an attempt to win in Europe.

8. Chaim Herzog, *The War of Atonement, October 1973: The Fateful Implications of the Arab-Israeli Conflict*, Boston: Little, Brown and Company, p. 189.

9. *Ibid.*, p. 272; and *The Washington Post*, November 12, 1977, p. A3.

10. Phillip A. Karber, "The Soviet Anti-Tank Debate," *Survival*, Vol. XVIII,



No. 3, May/June 1976, pp. 105-111 was the first author to point out this Soviet debate. This section of the essay draws heavily upon Karber's work even though the conclusions reached are somewhat different than Karber's.

11. Marshal A. A. Grechko, *The Armed Forces of the Soviet State (A Soviet View)*, translated and published under auspices of the US Air Force, Moscow, 1975, p. 282.

12. Karber, "The Soviet Anti-Tank Debate," p. 108.

13. Karber, "Die Taktische Revolution in Der Sowjetischen Militardoktrin," *Eurotaische Wehrkunde*, Vol. 26, June and July 1977.

14. *Ibid.*

15. US Congress, Senate, "American and Soviet Armed Services, Strengths Compared, 1970-1976," 95th Cong., 1st Session, August 5, 1977, *Congressional Record*, Vol. 123, No. 135, Part III, pp. S14069-14070.

16. DOD, *Annual Defense Department Report, FY 1977*, p. 100.

17. This is the basic assumption underlying the current MBFR negotiations. The American desire, because of its perceptions about interior lines of communications advantage, is to negotiate asymmetrical force reductions which would limit Soviet ability to reinforce its troops in the Central Region. The United States would like to negotiate the removal of some of its tactical nuclear weapons in exchange for a Soviet withdrawal of tank divisions. For a counterargument that interior lines of communication *have not* been that important historically see Colonel John G. Pappageorge, *Maintaining the Geostrategic Advantage*, Military Issues Research Memorandum, Carlisle Barracks, Pennsylvania: Strategic Studies Institute, December 2, 1977.

18. Robert G. Kaiser, *Russia: The People and the Power*, New York: Atheneum, 1976, pp. 329-330; and Central Intelligence Agency, *National Basic Intelligence Factbook*, Washington, DC: Central Intelligence Agency, 1977, p. 204.

19. Leo Heiman, "Soviet Invasion Weaknesses," *Military Review*, Vol. 49, August 1969, p. 41.

20. Soviet divisions are maintained at three levels of combat readiness. Category I divisions are manned at three-quarters strength. Category II divisions are manned at one-half to three-quarters strength and usually have all fighting vehicles. Category III divisions are really no more than cadre divisions and usually are manned at one-third or less strength. See International Institute for Strategic Studies, *Military Balance, 1977-78*, London: The International Institute for Strategic Studies, 1977, p. 9.

21. The number of personnel that Moscow would have to mobilize is deducted from charts found in *Ibid.*, p. 106. The number cited would probably be the minimum, not a "worst case" analysis, required to fill out understrength divisions.

22. Goldhamer, *The Soviet Soldier*, p. 7.

23. Former Secretary of Defense Donald Rumsfeld in his FY 78 posture statement went as far to say that reservists who are intended to fill our Category II and III divisions "receive no further training once they leave active duty." DOD, *Annual Defense Department Report, FY 78*, p. 87.

24. See Goldhamer, *The Soviet Soldier*, pp. 7-10.

25. *Ibid.*, p. 9.

26. *Ibid.*, pp. 25-30, 115, and 327-328.

27. Col. V. Vostrov, "Combatting Laxity and Oversimplification," *Voyenny*



*Vestnik (Military Herald)*, No. 3, March 1974, hereafter cited as *Military Herald*; Lieutenant General L. Sapkov, "For New Goals in Combat Expertise," *Military Herald*, No. 3, March 1975; "Tactical Training," *Military Herald*, No. 1, January 1976; and Lieutenant General P. Gur'Yev, "Target Training in Field Exercises," *Military Herald*, No. 3, March 1974.

28. Goldhamer, *The Soviet Soldier*, p. 115.

29. Walter H. Parsons, III, "The US-Soviet Map Gap," *Army*, Vol. 26, No. 8, August 1976, pp. 37-39. The problem, however, is that Parsons assumes that the individual soldier has great access to these maps and mockups when in fact they do not. Therefore, the utility of such maps and mockups is negligible.

30. Colonel General V. Varennikov, "A Commander's Creativity on the Battlefield," *Military Herald*, No. 10, October 1975; Colonel V. Vostrov, "Combatting Laxity and Oversimplification," *Military Herald*, No. 3, March 1974.

31. Kaiser, *Russia*, p. 11. See also Colonel I. Brezhkalus, "Student Group Map Exercises," *Military Herald*, No. 9, September 1974, where the author argued that his students demonstrated poor map exercise abilities. The schools lacked sufficient training aids, the students failed to understand military terminology; in general the students displayed poor knowledge in basic map reading skills.

32. For a more detailed discussion of Soviet/WP equipment see Robert T. Petty, ed., *Jane's Weapon Systems 1977*, New York: Franklin Watts, Inc., 1976.

33. John Erickson, "Trends in the Soviet Combined-Arms Concept," *Strategic Review*, Vol. V, No. 1, Winter 1977, p. 42.

34. Valdimir Petrov, "Formation of Soviet Foreign Policy," *Orbis*, Vol. 17, Fall 1973, pp. 827-828.

35. John Erickson, *Soviet-Warsaw Pact Force Levels*, USSI Report 76-2, Washington, DC: United States Strategic Institute, 1976, p. 67.

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that government and academic analysts should begin a comprehensive study of Soviet vulnerabilities and weaknesses before the United States makes any changes in posture, doctrine, or objectives based upon the short war advocates' recommendations.

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